Chile's Trade and Regional Integration Policy: An Assessment

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1. INTRODUCTION[1]

THE world has witnessed a veritable explosion of regional integration agreements (RIAs) in the last fifteen years. More than half of world trade now occurs within actual or prospective trading blocs. And nearly every country in the world is either a member of – or discussing or negotiating participation in – one or more RIAs.

Because regionalism entails second-best type policies, no general welfare theorems exist, and it is not possible to state *a priori* whether a RIA is beneficial or not. Answering such a question requires detailed empirical analysis. Nevertheless, some recent research (including World Bank, 2000; and Schiff and Winters, forthcoming) has led to general recommendations on how to maximise gains or minimise losses, and on issues that policy-makers need to keep in mind when considering whether to join or form a RIA.

The principal recommendations from this research are as follows. First, a developing country will benefit from unilateral trade liberalisation (UTL) because of the standard gains from trade in the absence of RIAs and because UTL reduces transfers to its trading partners induced by membership in RIAs. Second, a developing country is likely to do better economically in a North-South than in a South-South RIA. Third, both for economic and political economy reasons, South-South RIAs are likely to lower intra-bloc welfare, though if they are large South-South RIAs may improve the terms of trade. The smaller and poorer

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[1] This paper draws on Schiff (2002).

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member country is likely to lose at the expense of the larger and more developed one.

Fourth, a welfare-reducing RIA can be turned into a welfare-improving one by lowering external trade barriers sufficiently. Fifth, some forms of deep integration are likely to be necessary to achieve free intra-bloc trade and they are likely to be easier to obtain and to be more beneficial in North-South than in South-South RIAs. Sixth, rules of origin (ROO) can be costly and the cost rises in the case of multiple FTAs. Seventh, customs unions (CUs) are preferable because they do not require ROO, while FTAs are preferable because they allow individual member countries to liberalise unilaterally.

Eighth, South-South RIAs may generate political benefits by reducing tensions between member countries or by improving governance, though the latter is more likely in North-South RIAs. Ninth, South-South cooperation on regional public goods or international negotiations is likely to be beneficial, though whether a RIA is necessary or helpful is unclear. Finally, countries should not exploit weaknesses in the WTO system to implement protectionist policies, but rather should take advantage of the WTO to help liberalise their economies.

Chile started the process of opening up its economy through unilateral trade liberalisation in the 1970s. It proceeded to negotiate a number of regional – both bilateral and plurilateral – agreements in the 1990s. It has also participated in the multilateral trade liberalisation (MTL) process, and in groups with common interests at the WTO such as the CAIRNS group.

This paper examines Chile's various trade policy options in the light of recent analytical and empirical findings. Section 2 describes Chile's trade structure. Section 3 presents Chile's recent trade policies and Section 4 examines their consequences. Section 5 concludes.

2. CHILE'S TRADE STRUCTURE

This section briefly examines the structure and evolution of Chile's trade. All figures are for the year 2000. Exports of products based on renewable resources amount to US$6.2 billion, or about 34 per cent of total exports of US$18.5 billion. Of these, fruits and vegetables (and food products) amount to 32 per cent, fisheries (fresh, frozen and processed) to 18 per cent, wine to 9 per cent and forestry (and wood products) to 39 per cent. Mining exports amount to US$8.4 billion, or about 45 per cent of total exports.

In terms of destination, slightly over 50 per cent of fruits and vegetables are exported to the US, 19 per cent to the EU and 18 per cent to Latin America. The same order is obtained for fresh fish and fish fillet exports. However, 85 per cent of frozen fish are exported to Asia (79 per cent to Japan). Europe comes first with respect to wine exports (49 per cent) followed by the US (22 per cent), Latin

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America and Asia. In forestry products, the US is first (45 per cent), followed by Asia (32 per cent), Latin America, and Europe. As for cellulose, paper and others, exports are almost evenly divided between Latin America, Asia and Europe, with less than 2 per cent going to the US.

The dramatic growth of exports in 1990–95 was not sustained in the second half of the 1990s, declining from 90.5 per cent to 12 per cent for the respective five-year periods, with a cumulative growth rate for 1990–2000 of 113.5 per cent. The exports of products based on renewable natural resources (including elaborated and processed products) grew in 1990–2000 26 per cent faster than total exports, implying an increase in their share of total exports.

Among other high-growth categories were chemicals, petroleum and derived products, iron, steel and non-ferrous metals, and metallic products, machinery, equipment, electrical and transport material, and measurement instruments.

In terms of destinations, the growth of Chilean exports in 1990–2000 was higher than the average to all main destinations except the EU and Japan. The fastest growth of exports was to China and Mexico (both starting from a small basis), followed by Canada, Korea and MERCOSUR.[2]

Total imports amount to US$16.6 billion. The main category of imports in 2000 is metallic products, machinery and equipment, comprising 44 per cent of total imports, followed by chemical products at 20 per cent. The main sources of total imports are Latin America (35.8 per cent including Mexico, with MERCOSUR equal to 26 per cent), followed by the US (19.7 per cent), Europe (19 per cent) and Asia (17.4 per cent). The US has the largest share of metallic products, machinery and equipment. Latin America has the smallest share of that category and the largest share of food, beverages, tobacco and others and of chemical products. Asia has the largest share in 'dress, footwear, and others'.

The 1990–2000 cumulative growth rate of total imports was 146.2 per cent, approximately the same as for imports from the US. Imports from Mexico grew some 3.5 times faster, those from MERCOSUR close to twice as fast, those from Asia some 50 per cent faster, including rapid increases from China, and those from Europe more than 60 per cent slower. The growth rate of imports in 1995–2000 was less than one sixth of that in 1990–95, and it fell for all main trading regions except Canada.

3. RECENT TRADE POLICIES

Chile started reforming its trade policy in the 1970s. Trade liberalisation was based on the implementation of a uniform tariff, which – except for a temporary

[2] For more detailed information on the structure of Chile's imports and exports, see the reports of the Ministry of Foreign Affairs dealing with Chile's foreign trade (Ministerio de Relaciones Exteriores, 3rd report of 2001 and earlier issues).

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increase during the economic crisis of the early 1980s – was gradually reduced. The uniform tariff reached eight per cent in 2001 and is scheduled to reach six per cent in 2003. Chile has also applied price bands to a few products, an important departure from its policy of uniform tariffs. The price band became binding for wheat and sugar in 1982, with wheat flour and oil seeds added later on. The effectiveness of the price band for oil seeds (rape and sunflower) has been undermined by a loophole in the FTA with Bolivia because none was imposed on oil mixes despite their existence in vegetable oils.

During the 1990s, Chile also moved away from its uniform tariff policy by embarking on a strategy of preferential trade agreements, forming FTAs with MERCOSUR, Mexico, Canada, Andean Pact and Central American countries, and Cuba. Chile is also negotiating FTAs with the US and the EU and EFTA (comprising Switzerland, Norway, Iceland and Lichtenstein). It is also planning to resume negotiations on a FTA with Korea.

Furthermore, Chile recently passed legislation on safeguards (Modification of Law 18525, Article 9), despite the opposition of one hundred of the most reputable Chilean economists who expressed their views in a public letter. This may explain a sort of 'compromise' whereby Chilean safeguards were designed for a one-year period (renewable for a second year), even though four-year safeguards are legal under the WTO (renewable for another four-year period). Safeguards were used to raise protection on milk and products derived from it, and on 27 November, 1999, a safeguard for sugar was implemented that raised protection to levels of 70–80 per cent and even over 100 per cent at times, significantly above the 31.5 per cent binding at the WTO.

Because the safeguard for sugar was set to expire on 26 November, 2001, Chile requested that its tariff binding be raised from 31.5 per cent to 98 per cent. This was accepted under the condition that Chile provide compensation to its most important sugar provider, Argentina, and enter into 'good-faith' conversations with its second and third providers, Guatemala and Brazil. Compensation was made through the provision of zero-tariff sugar quotas. This was accepted by Argentina and Guatemala, but Brazil has complained that its quota is too small and does not compensate for its loss.

Chile has recently signed a phytosanitary agreement with China that includes a dispute settlement mechanism. Articles in the local press have reported that Chile is expected to sign a similar agreement with India, and a zoo-sanitary agreement with China.

Finally, Chile has been an active member of the CAIRNS Group, which consists of developed and developing agricultural exporters. The CAIRNS Group was influential in having agriculture included at the Uruguay Round of the WTO (and thus in future Rounds as well).

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4. CONSEQUENCES

Chile's trade policies and its negotiations with various countries or groups of countries have a number of political, political economy and economic consequences. These are examined next.

a. Politics

The FTA with MERCOSUR may entail security benefits. Chile and Argentina were involved in territorial disputes at different times throughout their history, and came close to a conflict in the late 1970s. This issue may be a thing of the past, but the FTA with MERCOSUR should further reduce any prospects of its recurrence. With Chile being more integrated economically with Argentina, and with Brazil as a more concerned partner, it is likely that any future dispute will be resolved with less friction. And the FTAs with Bolivia as well as with MERCOSUR and other Latin American countries have contributed to a spirit which has enabled Chile to consider Bolivia's request for access to the sea more positively.

Another reason for forming FTAs with countries of the region has been the perceived need for enhancing international political legitimacy after the military regime was replaced (Hachette, 2000). As for governance, entering into FTA agreements with the US and the EU may help strengthen Chile's democratic institutions. Note also that a democratic form of government is a required condition for association with MERCOSUR.

b. Credibility

Chile has signed FTAs with Central American and Andean Pact countries and with Cuba. Since Chile's credibility with respect to its economic policies is higher than that of these countries, these agreements are unlikely to contribute to Chile's policy credibility. They may even harm credibility because of the departure from uniform tariffs.

By signing a FTA with MERCOSUR, Chile became more closely integrated with that body.[3] Because the economies of its member countries are significantly more volatile than those of Chile's other main trading partners, a closer integration with MERCOSUR should raise the degree to which this volatility is transmitted to Chile's economy. This is likely to be costly because it complicates the production and export plans of Chilean exporters.

[3] Exports to MERCOSUR grew by 162 per cent during 1990–2000, or 43 per cent faster than total exports. Imports from MERCOSUR over the same period grew by 286 per cent, or close to twice as fast as total imports.

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Non-tariff measures have been increasing for some time in MERCOSUR and have undermined the level and security of the bloc's internal free trade (Berlinski, 2000) and of Chile's access to MERCOSUR markets. These problems generate additional costs for Chilean exporters (and for MERCOSUR countries exporting to Argentina) and further reduce MERCOSUR's already depleted credibility. Given Argentina's macroeconomic instability and the uncertainty with respect to its trade policy, it is clear that Chile's credibility would have been hurt much more deeply if it had integrated more closely with MERCOSUR by forming a customs union with it.

On the other hand, an agreement with the US or the EU is expected to provide some credibility benefits. By signing a FTA with the US or the EU, Chile is likely to be more widely perceived as belonging to a select club of countries. This may improve its ability to borrow abroad and may result in a decline in its cost of capital. However, given Chile's high level of international economic credibility, its borrowing costs are already very low (its country risk premium on international financial markets is 2.5 per cent), and whether a FTA with the US or the EU will in fact result in a lower cost of capital, and to what extent, is unclear.

Some chapters of the proposed US agreement may also serve to raise policy credibility, including the one relating to investment. Chile is very open with regard to foreign investment: there is no minimum (maximum) national (foreign) ownership requirement, no discrimination in establishment (national treatment applies), and no protection of national culture (no minimum time for national programmes on the radio or TV). But though Chile is very open in these as well as other areas (including international transport and telecommunications), foreign investors only have recourse to Chilean courts to settle any disputes and some of these issues are not codified into law. These problems are expected to be resolved in the investment chapter of the FTA with the US. With a bilateral investment treaty between the US and Chile, US investors will also have recourse to the International Centre for the Settlement of Investment Disputes (ICSID).

An investment agreement exists among Latin American countries (Acuerdo de Protección y Promoción de Inversión (APPI) in Spanish) that allows access to the ICSID. However, an agreement with the US providing stronger guarantees is likely to be beneficial, especially if the investment chapter negotiated with the US becomes a model for the FTA of the Americas (FTAA), because Chile has important investments in the region.

c. Issues Regarding Contingent Protection and Tariffs

Chile recently passed legislation on safeguards. These were applied to sugar, vegetable oils and milk. With the increase in the bound tariff at the WTO, sugar remains highly protected. The vegetable oils safeguard is no longer effective because of the loophole with respect to oil mixes in Chile's FTA with Bolivia. And

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the milk safeguard is no longer in effect due to the increase in the world price. However, though these safeguards no longer apply, this may not reflect a change in the authorities' policy stance. The safeguard instrument remains on the books and can thus be used at any time. In fact, there has been discussion concerning the introduction of safeguards for manufacturing products such as steel and lighters.

Chile has long benefited from its policy of uniform tariffs. This policy has several well-known advantages. It sets effective protection the same for all sectors at the nominal protection rate. It is simple, clear and transparent, and therefore reduces business costs and the temptation for discretion (corruption). Finally, it reduces the cost of the customs administration.

However, a policy of uniform tariffs has another important benefit, namely to turn trade policy into a 'public good'. Because a sector lobbying for protection under a uniform tariff policy receives only a small part of the expected benefit of raising the uniform tariff – with most benefits going to other import-competing sectors – it has little incentive to lobby and will prefer to free ride on other sectors' lobbying efforts. But since all sectors have similar incentives, the general free riding results in a low level of lobbying. Thus, under such a policy rule, raising tariffs in response to private sector lobbying is unlikely.[4]

This benefit does not obtain when policy instruments are privatised, as is the case with safeguards where one sector can lobby independently of others and capture all of the benefits obtained through its lobbying efforts. This is a powerful argument for maintaining a uniform tariff policy, and for staying away from contingent protection and other 'new' forms of protection.[5] The number of annual complaints presented to the Central Bank of Chile (in order to obtain some form of protection) averaged 31 in 1981–85, 14.4 in 1986–90, 5.6 in 1991–95, 1.7 in 1996–98 and 4.3 in 1999–2001 (Schiff, 2002). Thus, the number of complaints fell over the period 1981–98, and then increased again starting in 1999, the year when the law with respect to safeguards was passed.

Chile has been gradually lowering its uniform MFN tariff (to a scheduled 6 per cent in 2003), and this is likely to contribute further to its policy credibility. It has bound its tariffs at the WTO at 25 per cent for most products and at 31.5 per cent for a few. As noted earlier, Chile recently requested the WTO to permit an increase in its binding on sugar. A problem here is that binding at rates above the applied tariffs does not help Chile's credibility, and the increase in the bound rate for sugar is positively harmful on its own merits.

Chile should take advantage of the WTO to support its unilateral trade liberalisation efforts. Binding all tariffs at their applied (uniform MFN tariff)

[4] Uniform tariffs may be raised by the authorities in extreme situations, such as occurred in Chile in the early 1980s in order to deal with the large current account deficit.

[5] These include technical, sanitary and phytosanitary instruments, when used with a protectionist intent. For instance, Chile's non-standard method of grading meat has led Argentine and US beef producers to complain that this measure represents a technical barrier to trade (Fischer, 2002).

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rates, including the sugar tariff, and renouncing the use of contingent protection and other non-tariff protection measures, would significantly raise Chile's credibility by restoring MFN tariff uniformity and by ensuring that protection for specific sectors would not be raised in the future. It would also generate additional benefits that are examined in later sections.

d. The Political Economy of FTAs with the US and EU

Chile is negotiating FTAs with the US and the EU. The most important sectors for Chile in these negotiations are those based on renewable natural resources, including fruits, vegetables, forestry, fisheries, and elaborations of these products. This is so for two reasons. First, Chile has a comparative advantage in these sectors. Their exports have been growing faster than exports in general in recent years and are likely to have strong growth potential for some time to come. Second, those products face the highest trade barriers in export markets, including tariff escalation and tariff peaks of up to 17 per cent in the US, seasonal quotas, phytosanitary barriers and anti-dumping measures (e.g., for salmon).[6]

In this context, protection of import-competing agriculture is likely to weaken Chile's negotiating position with the US and the EU. Wheat and wheat flour are protected by a price band, and these products are of direct interest to US exporters. Sugar is now highly protected, though this should not be of concern to the US, which is itself a sugar importer.[7] If Chile is unwilling to liberalise its import-competing agriculture with respect to imports from its prospective FTA partners, it will be more difficult to argue for improved market access for Chile's agricultural exports. Thus, protection of agriculture not only hurts welfare directly but may also hurt the prospects of one of the most dynamic sectors of the economy.

Politically sustainable RIAs are typically trade diverting (Hirschman, 1981; and Grossman and Helpman, 1994), and an exchange of exceptions is usually negotiated for sectors with the greatest potential for trade creation. Chile should avoid such an outcome in its FTAs with the US and the EU by offering to eliminate the price band exception in exchange for a removal by the FTA partners of their trade barriers on Chile's agricultural exports and other exports based on renewable natural resources.

By binding its tariffs at the WTO at the applied uniform MFN tariff rate rather than at higher rates, Chile will strengthen its negotiating position in its FTAs with the US and the EU. Those partners will no longer be able to counter Chile's

[6] Mining is obviously an important export sector as well. However, it is less important in terms of negotiations because it faces low trade barriers and it is less likely to grow at high rates in the future.

[7] However, it has complicated matters with Brazil.

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requests for improved market access for its agricultural exports by arguing that, just as Chilean authorities respond to their import-competing agricultural lobbies, they must take their own lobbies into account.

The US has a FTA with Canada and Mexico (NAFTA) as well as with Israel. Chile is the first country in South America to undertake negotiation with the US of a FTA that eventually could become the Free Trade Agreement of the Americas (FTAA). This raises the question of whether early entry into an agreement is beneficial or costly. Theory tells us that being among the first to join should be beneficial because as more countries join, excluded countries suffer from increased trade diversion and are thus willing to pay more to join the RIA.

Moreover, the US administration is eager for the FTAA to move forward, and any problems or failure in the negotiations with Chile is likely to provide a negative signal to other Latin American countries that expect to enter into negotiations in the future. This might provide Chile with some increase in bargaining power.

On the other hand, where a small country negotiates as the first member of a RIA with a larger country or 'hegemon', negotiations are likely to be subject to a 'demonstration' effect and a 'precedent' effect, both of which go in the other direction. The hegemon is likely to act 'tough' in its negotiation with its early partners in order to demonstrate toughness to future partners and to be able to negotiate better conditions with them. Similarly, the US may want to set precedents that may be of use in future negotiations. US negotiators are said to have told their Chilean counterparts that they want a chapter on government procurement included in the agreement. This is not because they are concerned with Chile's policy, which is very open in this area, but because they want to establish a precedent for the FTAA negotiations that will take place with the larger countries of the region. The same phenomenon seems to hold with respect to the chapter on intellectual property rights, in which the US is pursuing standards well exceeding those required by WTO membership.

e. Static Welfare Effect

Harrison, Rutherford and Tarr (1997) have examined the effect of Chilean FTAs with MERCOSUR and NAFTA using a computable general equilibrium (CGE) model. The study uses the level of uniform tariffs prevailing at the time, namely 11 per cent, as its base case. The authors also provide results for a uniform tariff of 6 per cent, the level that will prevail in 2003. The authors simulate the effects with various elasticities of substitution, and reported here are the results with central elasticities.[8]

[8] The results with other values for the elasticities are qualitatively the same in general.

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Chile loses by forming a FTA with MERCOSUR and loses more by forming a customs union with MERCOSUR. However, when its uniform tariff equals 6 per cent, Chile gains modestly from a FTA with MERCOSUR. On the other hand, Chile gains from a FTA with NAFTA, whether its uniform tariff is 11 per cent or 6 per cent, though in the latter case the benefit is about 80 per cent larger. Chile actually loses from a FTA with NAFTA if its market access does not improve. The main reason for the difference in results between the FTA with NAFTA and with MERCOSUR is the high level of protection and tariff escalation in NAFTA for the specific products that matter to Chile, such as fruits, vegetables and fish products.

MERCOSUR raised its common external tariff (CET) from an average of 12 per cent to 15 per cent in response to the Asian crisis, making preferential access to MERCOSUR more attractive for Chile. With Chile's uniform tariff level equal to 6 per cent in 2003 and assuming MERCOSUR maintains an average CET of 15 per cent, Chile should benefit from its FTA with MERCOSUR as well.

There is some question as to whether Chile can hope for improved market access in the US, a critical issue. With an economy of less than one per cent of that of the US, Chile has little bargaining power and it is possible that US lobbies will prevent improved market access for Chile's exports of products based on renewable natural resources. Similarly, the protection of agriculture is almost sacrosanct in the EU. The EU also has a privileged relationship with the ACP (Africa, Caribbean and Pacific) countries that enjoy preferential access to the EU market. Consequently, it is likely that negotiations with the EU will be difficult regarding Chile's ability to obtain improved access for its agricultural exports and other exports based on renewable natural resources in EU markets.

As for FTAs with Central American and Andean countries, Fischer (2001) argues that most of them have had little effect, either because trade is not significant or because the exceptions cover such a large share of the items traded. Moreover, exceptions typically occur in products where potential for trade creation exists. Thus, the items on which exceptions are not imposed are more likely to be trade diverting, which should result in a loss for these FTAs as a whole.

With Chile undertaking all these existing and prospective FTAs in its hemisphere and with the EU and EFTA, Asia remains the only major trading region with whom Chile has not signed or is not negotiating an agreement. Forming a FTA with the major Asian trading partners should provide static gains for two reasons. First, on the export side it will improve Chile's market access to these economies; and second, on the import side Chile will have lowered its preferential tariff to *all* its major trading partners, with an effect similar to that of unilateral trade liberalisation. It will also provide dynamic benefits as is discussed below. With respect to improved market access, China's accession to the WTO will result in an opening up of its economy. Chile has recently signed a

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phytosanitary agreement with China, and this is likely to generate important benefits in the future. Also, Chile is expected to restart FTA negotiations with Korea. It may be important also to enter into FTA negotiations with the other large Asian economies, particularly with Japan.

f. Intellectual Property Rights

In its FTA with Chile, the US is expected to go beyond the multilateral TRIPS (Trade Related Intellectual Property Rights) agreement, both in terms of substance and timetable. This could be costly for Chile in the short and medium term, and also in the long term unless Chile becomes a large producer of intellectual products and services. In 1991, Chile passed a new law on patents and protection of intellectual property. However, the US also wants patent protection for the period before 1991.

The area of greatest concern is pharmaceuticals, where Chile produces a variety of generic products and sells them at low price without paying royalties to foreign patent holders. Enforcement of intellectual property rights in a FTA with the US will result in a direct outward transfer and in an increase in health costs in Chile. This may especially hurt low-income consumers. The same is likely to occur in the FTA with the EU and EFTA.

A study from CIADE of the University of Chile calculated the cost for Chile of conforming to the WTO's TRIPS agreement (a bill which is presently before Chile's Congress) and concludes that it would result in a 75 per cent increase in the cost of medicines. Not all studies show such large increases, but given that the US is planning to go beyond the TRIPS agreement in its FTA with Chile, the cost of the latter to low-income consumers is likely to be significant. One reason the cost of medicines will rise so much seems to be that aspects of the bill now before Chile's Congress exceed Chile's commitment to the WTO.

In recent years, some developing countries have obtained discounts on important anti-HIV medicines by threatening to allow domestic manufacturers to produce the drug. For instance, Brazil has successfully used this strategy with Merck and Roche, two big drug companies. The US threatened a similar move and got Bayer to provide Cipro, an antibiotic against anthrax, for close to half the prior price (*The Economist*, 27 October, 2001). It is worth nothing that, even though fewer than twenty anthrax cases occurred in the US, it did not hesitate to challenge a valid patent.

In fact, India, Brazil and others have called for change in the TRIPS agreement. For instance, note that developing countries that do not have the capacity to produce generics will have to import them from other countries, an issue that may prove difficult under TRIPS rules. The US seems firm in wanting to limit use of such imports. For those who do have the capacity to produce generics, a separate declaration at the Doha Ministerial on the TRIPs Agreement

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has clarified that Members have the right to grant compulsory licences in the area of pharmaceuticals and that they have the freedom to determine the ground upon which such licences are granted. This (and other provisions in the declaration) clarifies several ambiguities with respect to flexibilities available in the TRIPS Agreement, and should strengthen Chile's position in its FTA negotiations.

Finally, in the long run, if Chile becomes an important producer of intellectual goods and services, it should gain from stronger laws and better enforcement. In this context, Luthria and Fikkert (2001) obtained estimates of the private value of patent protection in 12 different technology sectors both before and after India weakened its intellectual property regime in the 1970s. They found that the weaker regime resulted in a 23 per cent drop in the private value of patent protection.

g. Rules of Origin

No empirical study of the administrative costs of rules of origin (ROO) exists for Chile. The administrative cost of ROO has been estimated at three to five per cent of the f.o.b. value of imports for EFTA (Herin, 1986). How do Chile's potential costs compare to these estimates? First, the cost of ROO is likely to rise with the number of FTAs. As described above, Chile has signed FTAs with MERCOSUR, Canada, the Central American and Andean Pact countries, the EU, Mexico, and Cuba, and it expects to sign one with the US in the near future. Assume conservatively that this issue does not affect Chile's administrative ROO costs relative to those estimated for EFTA. Second, the need to control for origin, in order to determine whether or not to provide preference to goods imported from partner countries, falls as the level of tariffs declines. The lower the tariffs, the smaller the gains from trade deflection and the smaller the number of products for which trade deflection is beneficial. With Chile's uniform tariff expected to decrease to six per cent by 2003, the cost of ROO is expected to decrease as well.

Thus, assume that costs for Chile are lower than those estimated for EFTA in 1986 and amount to two per cent of the value of imports.[9] Even at this small percentage the costs are not negligible. Based on import values for the year 2000, the estimated annual costs amount to some US$285 million for imports from the countries or regions with which Chile already has a FTA or is negotiating one. These costs rise to about $331 million if the principal Asian countries are included. The marginal cost of the FTA with the US is estimated at about $66 million, with the EU at about $45 million, with Japan at $14 million, and with Korea at $10 million. These calculations assume a constant marginal cost, even though it probably rises as the number of FTAs increases. These costs may also increase in the future due to imports rising with economic growth.

[9] Available data on Chile's imports are c.i.f. rather than f.o.b., so that calculations based on those values would somewhat overstate the cost of ROO.

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Note that the administrative costs only represent part of the cost of ROO. Even if tariffs were completely eliminated, other costs would remain, including the costs of the additional trade diversion caused by ROO and the cost for exporters of proving origin when exporting to markets of partner countries. On the other hand, administrative costs could be reduced if Chile were to lower its uniform MFN tariff yet more.

h. Dispute Settlement Mechanism

An important aspect of negotiating a RIA is the establishment of a dispute settlement mechanism (DSM). Agreements typically do not cover all possible aspects of bilateral trade relations in full detail and they are not able to anticipate all potential future events that may occur. Consequently, DSMs are established to deal with disputes that may arise.

DSMs typically increase confidence in the security of market access of member countries because they now have a mechanism to resolve disputes that was not available previously. The effectiveness of a DSM – and the trust of the various parties in it – depends on how it is designed, the authority given to it, the relative power of RIA members, and other factors.

Without having any specific information about it, one might speculate that the DSM in the FTA between Chile and the US might be modelled after the one negotiated between the US and Mexico. In this context, it is worth noting that in its trade disputes with the US, Mexico has not always turned to NAFTA's DSM. Rather, it has (successfully) turned to the WTO's DSM because it felt that its chances were better there.

i. Foreign Direct Investment

The FTA with the US is likely to raise FDI flows to Chile. There are three reasons to expect this. First, there will be improved access, presumably significant, to the US market. Second, the investment chapter in the agreement will provide greater guarantees to foreign investors. Third, the FTA should enhance the credibility of Chile's policy regime and reduce the country's international borrowing costs. The last factor is perhaps the most speculative and its benefit, if any, would be the reduction in the cost of funds rather than any increase in FDI.

A similar FTA with the EU is also likely to raise FDI. Moreover, by raising policy credibility, a decision to bind tariffs at the applied MFN rate of six per cent in 2003 rather than at the present bound rates, could also raise FDI flows. Still further, it should reduce FDI flows going into import-competing sectors because these could no longer expect future increases in protection. Such a development would probably raise welfare because much tariff-jumping FDI locates capital in inefficient sectors.

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j. Growth and Knowledge Diffusion

Chile is unlikely to absorb much knowledge from its FTAs with Latin American countries. In fact, knowledge absorption and productivity growth may have been affected negatively because these agreements led to a reduction in trade with OECD countries (because of trade diversion effects) and thus in less knowledge absorption than in the absence of these agreements.[10]

Guidotti (2001) and Yeats (1998) have argued that the protection offered by MERCOSUR has led Argentina to increase production of low-quality goods to be exported to Brazil that cannot compete on the world market. Consequently, when Brazil devalued, Argentina was unable to redirect its output towards the world market, and this exacerbated the negative impact of Brazil's devaluation on Argentina's economy.

This situation may apply to Chile as well. For instance, 13 per cent of Chile's exports to Argentina in 1999 consisted of machine and auto parts. Chile has no comparative advantage in the production of auto parts and exports them to Argentina only because of its preferential access to that market. Similarly, Chile exports aeroplane and helicopter parts to Brazil (amounting to three per cent of total exports to Brazil in 1999). While these activities provide static welfare gains, they make Chile more dependent on the MERCOSUR economies and less able to respond to economic fluctuations there by redirecting exports. They also may reduce productivity growth by reducing Chile's exposure to the competitive pressures of world markets.

One effect of forming FTAs with the US and the EU should be to increase trade with these regions and to reduce trade with Latin American countries. This will raise the degree of knowledge absorption and the contestability of Chile's market, both of which should raise productivity growth. On the other hand, these agreements will also reduce trade with Asian countries such as Japan and the East Asian Tigers (Hong Kong, Korea, Singapore, Taiwan) who produce large amounts of R&D and technological innovations. It was argued earlier that for static welfare reasons it is important for Chile to enter into FTAs with Asian countries. The logic in this section argues that it is important for dynamic reasons as well.

k. Standards

The FTAs with the US and the EU may require some side agreements on labour and environmental standards. It is beyond the scope of this study to examine Chile's labour and environmental laws in any detail (with some minor

[10] Schiff et al. (2002) find that the South learns more through trade from the North than from other countries of the South.

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exceptions as noted below). Sanitary and phytosanitary standards are likely to be on the agenda for negotiation of the FTAs with the US and the EU. This section is limited to a few general points that I believe should be kept in mind when assessing the impact of such agreements.

The optimal level of a voluntary standard depends on its costs and benefits, and that level therefore varies with the level of income. A standard that may be optimal for a rich country may not be optimal for a poor one. For instance, requirements on food packaging might raise costs to such a point as to make food unaffordable to many in poor countries. Similarly, a standard that prohibits child labour might mean starvation for many developing country farmers. Thus, a FTA between a developed and developing country that includes requirements by the former that various standards be upgraded may reduce the latter's welfare.

On the other hand, existing standards in the developing country may be below their optimal level. For instance, the laws may be adequate but not their enforcement, possibly due to asymmetric information and agency problems. Firms – the agents – have better information on their own actions than the authorities – the principal. Another problem is asymmetric power, in that firm management may be stronger than labour in determining how the rules are to be implemented. Misala and Romaguera (forthcoming) find that at a formal level, Chile's labour legislation is on a par with that of the US, but that Chile needs to ensure compliance with its own labour laws.[11] The authors state that the biggest problems occur in remote locations and in sectors with difficult access, such as forestry and farm fishing, where supervision is hardest.[12]

The laws themselves may be inadequate. This too may be due to asymmetric information (the authorities may not know how bad things are) or because of lobbying or lack of information (the costs of higher standards may be concentrated in a few firms while the benefits are diffused or not well known, resulting in little counter-lobbying).

In the case of either sub-optimal standards or sub-optimal enforcement, if a FTA generates higher standards or improved enforcement, welfare may increase. This depends on the standards that are agreed upon. If the FTA leads the developing country closer to its own optimum, it will gain. On the other hand, the negotiated standard may be excessively high for the developing country. This typically occurs when the developed country uses mandatory standards as a means of raising production costs in the developing country and as a means of protecting its own industry. An example of the latter effect of a phytosanitary

[11] They argue that compliance varies between sectors, firms and subcontractors, and recommend that in order to improve compliance, firms be made responsible for security and other labour problems of their subcontractors.

[12] In these areas, labour unions seem to have made alliances with their counterparts in the US (and Canada), so that US negotiators are sometimes better informed on non-compliance in Chile than Chilean ones.

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standard is provided in Otsuki et al. (2001). They show that, relative to international standards, implementation of the EU's new aflatoxin standard will cut African exports of nuts, cereals and dried fruits to the EU by 64 per cent. It probably would lower the EU's welfare as well because the standard would raise costs for EU consumers while the reduction in health risks would be minimal.

FTAs have attempted to place WTO principles of non-discrimination, transparency, and so on into standards agreements. For instance, NAFTA includes WTO principles in the technical barriers to trade (TBT) and SPS Agreements, and also ensures that goods can be tested and certified in any of the three markets and circulate with one certificate. Chile would benefit from a similar agreement on standards.[13]

l. Price Bands and Related Price-raising Mechanisms

Price bands exist for sugar, wheat, wheat flour and oil seeds. The design of the price bands is such as to reduce price variability and raise average prices. The reason for the latter is that price reductions (by lowering tariffs when world prices are high) are limited by the low and decreasing level of the uniform MFN tariff, while price increases (when world prices are low, as is currently the case) are 'limited' by the much higher tariff bindings at the WTO. Bindings at the WTO are 31.5 per cent for wheat and 98 per cent for sugar, while the MFN tariff is currently 7 per cent.

The price bands are thus protectionist (and their protectionist effect rises as the uniform MFN tariff falls). This raises production costs for bread and other flour-based products and for all products that use sugar as an input, including soft drinks and candy products. Thus, the bands have a negative impact on welfare. One justification for the price bands expressed by the wheat and sugar industries is to protect employment. However, the price bands have the opposite effect in the industries that use wheat (or wheat flour) and sugar as inputs. Thus, the net employment effect is ambiguous *a priori*.

Another argument is that the price bands and related policies cannot be eliminated because output is concentrated in a few regions of Chile that have no substitute agricultural products and no alternative forms of employment. However, removing protection should result in lower land prices, which is likely to make some alternative activities profitable. Farmers in neighbouring regions may find it attractive to use the cheaper land for production. Further, some investors are already experimenting with alternatives. For instance, tulip bulbs have been planted experimentally in the region of Osorno and the return has been extremely high.

[13] For more on the use of standards for development, see Wilson (2001). For more on trade and standards, see Hufbauer et al. (2001).

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Finally, the extent to which small farmers are helped by the protection policy is open to question. For instance, Chile's sugar policy, including its price band, has been found by Galetovic (2001a and 2001b) to be of little help to small sugarbeet producers. Farms with less than five hectares receive less than four per cent of the transfers to producers and less than one per cent of the total transfers. Moreover, the policy is regressive. Fischer (2000) found that the poorer consumers lose the most, for the share of the lowest income quintile spent on sugar is over 12 times higher than that of the first quintile. The policy also entails large transfers to foreign capital because IANSA, the sugar monopsony, receives some 48 per cent of the transfer while 51 per cent of IANSA is owned by foreign capital. This entails an additional welfare cost, over and above the traditional cost of protection. In fact, Schiff (2002) estimates that transfers to IANSA are about 20 per cent larger than transfers to *all* sugarbeet producers and are larger than the cost to the poorest consumers. Moreover, 76 cents are transferred to foreign capital for each dollar of tariff revenue the government collects.

5. CONCLUSIONS AND RECOMMENDATIONS

Chile is close to signing a FTA with the US. Though studies seem to indicate that Chile should benefit from it, and though dynamic productivity gains from increased competition and knowledge absorption are likely to be important, the benefits ultimately will depend crucially on the degree to which Chile's access to US markets improves, on the cost of implementing the intellectual property rights agreement, and on the cost of enforcing the rules of origin. Similar points apply to FTAs with the EU and EFTA. Static and dynamic benefits are more doubtful with respect to FTAs with MERCOSUR and Central American and Andean Pact countries.

The main region left out of this process to date is Asia. Therefore, it is advisable that Chile start negotiations on FTAs with Asian countries as soon as possible. A first step in this direction is the recent signing of a phytosanitary agreement with China and the decision to renew negotiations on a FTA with Korea.

Chile will increase the benefits (or reduce the losses) of its existing and future regional agreements by lowering its uniform MFN tariff beyond the level of six per cent in 2003. This will also provide the benefits of unilateral liberalisation and lower the cost of administering rules of origin. Chile would also benefit from binding all its tariffs at the applied MFN uniform tariff rate, including sugar, and should refrain from using non-tariff trade barriers for protectionist purposes. This may require compensation to producers of price-band products (sugar and wheat) to make the reform politically feasible.

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